A Guide to Understanding

North Dakota's Infectious Waste

Regulations

North Dakota Department of Health
Environmental Health Section
Division of Waste Management

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TABLE OF CONTENTS

Page

Attachments

A. Introduction

This document is organized by subject in a question-answer format to aid the reader in understanding North Dakota's regulations governing the management of infectious waste. These regulations, Chapter 33-20-12 of the North Dakota Administrative Code (NDAC), are included as Attachment 1 and should be reviewed for a full understanding of infectious waste management requirements.

REGULATORY AUTHORITY.
The North Dakota Department of Health promulgated Chapter 33-20 NDAC pursuant to its authority under North Dakota Century Code (NDCC) Chapter 23-29, Solid Waste Management. The regulations became effective Dec. 1, 1992.

WHO ENFORCES THE REGULATIONS?
The North Dakota Department of Health, Division of Waste Management, is responsible for monitoring compliance with the regulations.

JOINT AND SEVERAL LIABILITY.
Infectious waste generators are responsible for the storage, collection and disposal of their infectious waste. Generators are responsible for ensuring that infectious waste is transported off-site for treatment by a permitted transporter and disposed at a site or facility which has all applicable permits required to manage infectious waste.

THIS DOCUMENT IS NOT LEGAL ADVICE. READ THE ENTIRE DOCUMENT.
This guide is not intended as legal advice, but as an aid to understanding the North Dakota Infectious Waste Management Regulations, Chapter 33-20-12 NDAC, through a question-answer format.

This is the first edition of this document. The document will be periodically revised as new questions arise, new information becomes available, or if regulations change. Comments on the content and readability of the document are encouraged. Comments may be sent to the Division of Waste Management, 2301 8th Avenue North, Fargo, ND 58102.

B. Infectious Waste

Question: What is infectious waste?

Answer: The Section 23-29-03.5 NDCC defines infectious waste as "solid waste that may contain pathogens with sufficient virulence and in sufficient quantity that exposure of a susceptible human or animal to the solid waste could cause the human or animal to contract an infectious disease." Regulated infectious waste includes *but is not limited to*:

- Sharps

- Cultures and Stocks
- Human blood and Blood Products
- Pathological Waste
- Animal Waste
- Isolation Waste
- Unused Sharps

The majority of waste produced at any medical facility is not classified as infectious waste. Materials such as office waste, paper from examination tables, gauze, packaging and band-aids are not considered infectious waste and may be disposed of as regular solid waste. North Dakota does not have a separate definition for medical waste.

Question: To whom do the rules apply?
Answer: The rules apply to all generators and handlers of regulated infectious waste. Generators include anyone who generates infectious waste, such as hospitals, clinics, nursing homes, home health care providers, first aid stations in schools and industries, veterinarians, tattoo parlors, chiropractors, dentists, laboratories, research facilities, health units, and emergency medical service providers. Waste handlers include anyone who handles, transports, stores, processes, treats or disposes of infectious waste.

Question: What is excluded from the definition of regulated infectious waste?
Answer: Hazardous waste, ash from incineration of infectious waste, treated infectious waste and infectious waste generated in a household are excluded from the definition of regulated infectious waste. Management of these wastes are not covered in this document. Information about the management of sharps from households can be found on our web page: http://www.health.state.nd.us/wm/swp/medwaste.htm

C. Sharps

Question: What are sharps?
Answer: The NDAC defines sharps as "Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips."

Question: Do all syringes without the attached needle have to be managed as infectious waste?

Answer: If the syringe, without the attached needle, contained an infectious agent, blood or blood products or bodily fluids it must be managed as an infectious waste. All other syringes (i.e., dose syringes, irrigation syringes) may be managed as a solid waste. The appropriate solid waste transporter, transfer station (if used) and disposal facility must be informed of your practices.

Question: Are plastic slides and cover slips included in the definition of a sharp?
Answer: Yes, if they were in contact with an infectious agent.

Question: Do sharps have to be rendered nonsharp?
Answer: Yes. The rules state that sharps must be incinerated or disinfected and sharps that are not incinerated must be rendered nonsharp before disposal. Processes to render sharps nonsharp include grinding, shredding and encapsulation.

Question: How does encapsulation work?
Answer: The purpose of encapsulation is to ensure that individual sharps cannot be freed through an inadvertent bursting of the sharps container. A variety of encapsulation materials are available, such as epoxy, grout and concrete. However, it is imperative that the encapsulation of sharps for ultimate disposal in a permitted solid waste landfill meet the following criteria, regardless of the encapsulation that is used:

A. The encapsulating mixture must be sufficiently fluid to penetrate the collected sharps to the bottom of the container.
B. The encapsulating mixture must surround ALL the collected sharps.
C. The encapsulating mixture must "set" to a rigid form prior to disposal in a solid waste disposal site.
D. The encapsulator must not be of an expanding nature that will burst the sharps container.

Sharps encapsulated in accordance with the above criteria do not have to be specially marked. However, it is recommended that the solid waste facility be made aware of the management practices.

Question: Can sharps containers be made out of glass?
Answer: No. Glass is an unsuitable material for sharps containers due to the increased risk of injury it poses. Sharps must be placed in a closable, rigid, leakproof and puncture-resistant biohazard container. (See the Bloodborne Pathogen Standard (BPS) at: http://www.osha.gov/SLTC/bloodbornepathogens/index.html for additional information.)

Question: Are orthodontic wires considered sharps?
Answer: The federal Occupational and Safety Health Administration (OSHA) includes

orthodontic wires in its definition of sharps in the BPS. Therefore, facilities required to comply with the BPS must manage the wires as sharps.

D. Cultures and Stocks

Question: What are cultures and stocks?

Answer: The NDAC defines cultures and stocks as "Cultures, and stocks of infectious agents and associated biologicals, including cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures are all considered infectious waste."

Question: So what exactly does that mean?

Answer: Cultures and stocks refer to systems used to grow and maintain infectious agents in vitro, including, but not limited to:

- Nutrient agars, gels, broths (including those utilizing human blood or blood products).
- Human and primate cell lines.
- Impure animal cell lines.

The term biologicals is intended to mean preparations made from living organisms and their products that are used in diagnosing, immunizing or treating human beings or animals, including, but not limited to:

- Serums.
- Vaccines.
- Antigens.
- Antitoxins.

Last, the phrase "culture dishes and devices used to transfer, inoculate or mix cultures" refers to items that have come into contact with infectious agents, as in the recovery of such agents in culture from clinical specimens, and includes:

- Plastic or glass plates, flasks, vials, beakers, bottles, jars and tubes.
- Inoculation loops and wires.
- Manual and mechanical stirring devices.
- Rubber, plastic and cotton stoppers and plugs.
- Filtering devices made of natural and artificial substances.
- Materials used to clean and disinfect items indicated above after routine use or accident.

Question: How can unused portions of vaccines be disposed?

Answer: Live or weakened vaccines are classified as infectious waste under the infectious

waste rules. Vaccines made from a killed virus are not infectious and may be managed as solid waste.

E. Human Blood and Blood Products

Question: What is included in the human blood and blood products category?
Answer: Human blood and blood products include liquid waste human blood; products of blood; items saturated or dripping with human blood; or items that were saturated or dripping with human blood that are now caked with dried human blood (including serum, plasma, and other blood components, and their containers).

Question: How can blood and body fluids be disposed?
Answer: Blood and body fluids may be discharged directly into a Department of Health-approved wastewater collection/treatment system with the approval of the local authorities.

Question: How can suction canisters be managed?
Answer: Suction canisters can be treated and solidified with products registered with the U. S. Environmental Protection Agency (EPA). Once the liquids in the suction canister have been treated and solidified, they may be disposed of in the regular trash. Attachment 2 lists EPA's Registered Antimicrobial Products for Medical Waste Treatment (updated Dec. 2, 2002). These products must be used to be in compliance with the rules.

Question: Are feminine hygiene products considered infectious waste?
Answer: No, these items are considered solid waste.

Question: Are dressings, band-aids and used gloves considered infectious waste?
Answer: No. These items are only considered infectious waste if they are saturated or dripping with blood. Any material that is caked with dried blood that would dislodge during handling would also be considered infectious waste. However, any material that contains blood which has been absorbed into that material so that it will not adhere to other surfaces upon contact can be disposed of as solid waste.

Question: Would all tubing be considered infectious waste?
Answer: Any tubing that contains blood is considered infectious waste. If there is no evidence of visible blood inside the tubing, then it is considered solid waste. Also, needles with attached tubing must be managed as infectious waste.

Other critical factors for determining if the tubing used in patient care must be managed as regulated infectious waste are (1) direct contact with any of the fluids identified by OSHA as being possible sources of transmission of infectious agents; and (2) the quantities of these fluids. OSHA has described semen, vaginal secretions, pleural fluid, cerebrospinal fluid, synovial fluid, pericardial fluid, amniotic fluid,

saliva in dental procedures, and any fluid visibly contaminated with blood as bodily fluids. Conversely, feces, urine and vomitus are not included unless they contain visible blood. For tubing to be designated as regulated infectious waste, it must have been in contact with those fluids listed by OSHA. For example, tubing used in gastrointestinal procedures that is visibly coated with body fluids should be discarded as regulated infectious waste. As stated in the universal precautions requirements of the BPS, if under normal circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

Question: Do linens soiled with blood and/or other body fluids have to be treated as infectious waste?

Answer: No, if the linens are laundered, reused and do not enter the waste stream. Proper handling and laundering are required in accordance with Centers for Disease Control and Prevention (CDC) and OSHA guidelines and standards.

F. Pathological Waste

Question: What is pathological waste?

Answer: The NDAC defines pathological waste as "human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers. Body fluids include but are not limited to semen, vaginal secretions, pleural fluid, cerebrospinal fluid, synovial fluid, pericardial fluid, amniotic fluid and saliva in dental procedures. Conversely, feces, urine and vomitus are not included unless they contain visible blood."

Question: If a patient prefers that a body part be managed in another manner rather than sent out as infectious waste, is this allowed?

Answer: Yes. Human corpses, remains, products of conception, and anatomical parts that are intended to be interred, cremated or donated for medical research are excluded from the definition of infectious waste. If the pathological waste contains a highly infectious disease, then it must be managed as an infectious waste.

Question: Are teeth considered infectious waste?

Answer: Yes. Extracted teeth are considered a pathological waste (blood and tissue) and must be managed as a regulated infectious waste. Extracted teeth sent to a dental laboratory for shade or size comparisons should be cleaned, surface-disinfected with an EPA-registered disinfectant and transported in a manner consistent with OSHA. Extracted teeth can be returned to patients upon request.

Extracted teeth containing dental amalgam should not be placed in an infectious waste container that uses incineration for final disposal. Teeth with amalgam should be disinfected and disposed of as solid waste. Commercial metal recycling

companies also might accept extracted teeth with metal restorations, including amalgam.

Question: Is the disposal of human fetuses governed by the infectious waste regulations?
Answer: No. However, the disposal of nonviable humans fetuses shall meet Section 33-03-02-05 NDAC which requires incineration, burial or cremation.

Question: How are organs and tissues that have been fixed for cytological and/or histological examination to be managed?
Answer: Since the fixatives are considered to be hazardous materials, organs and tissues discarded with these chemicals must be processed as hazardous waste, except for blocks of tissue in paraffin or similar embedding materials. The latter prevent the fixatives from leaching into the environment and the chemical fixatives destroy any potential pathogens in the tissue block. Therefore, tissue blocks can be discarded as solid waste. Conversely, if organs and tissues disposed separately from fixatives must be managed as regulated infectious waste.

G. Animal Waste

Question: What Is animal waste?
Answer: The NDAC defines animal waste as "contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals, or testing of pharmaceuticals."

Animal waste generated outside the medical community should be handled according to the North Dakota Department of Agriculture rules and guidelines.

H. Isolation Waste

Question: What is isolation waste?
Answer: The NDAC defines isolation waste as "biological waste and discarded materials contaminated with blood, excretion, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases."

The infectious agents causing these diseases are listed in Level 4 of the CDC's document "Classification of Etiologic Agents on the Basis of Hazard."

CLASSIFICATION OF BIOSAFETY LEVEL 4 AGENTS

There are no bacteria or fungi that are Biosafety Level 4 agents; (all are viruses).

Central European tick-borne encephalitis
Congo-Crimean hemorrhagic fever
Ebola
Guanarito
Junin
Kyasanur Forest disease
Lassa
Machupo
Marburg
Omsk hemorrhagic fever
Russian Spring-Summer encephalitis
Sabia

The CDC guidelines do not list the AIDS virus; therefore, waste generated while treating a patient with AIDS is not an isolation waste.

Question: How can a copy of CDC's "Guidelines for Isolation Precautions in Hospitals" be obtained?

Answer: A copy of the guideline can be obtained from CDC's web site at http://www.cdc.gov/ncidod/dhqp/guidelines.html

Question: Are urine and feces included under the regulations?

Answer: Not usually, unless the wastes are from a patient that has a disease classified as a Biosafety Level 4 Agent. Then they must be managed as regulated infectious waste. Otherwise, urine and feces should be disposed of through a municipal wastewater disposal system or a septic tank, and the urine cups and stool sample kits can be placed in a bag and disposed of as solid waste. One bag is adequate if the bag is sturdy and the article can be placed in the bag without contaminating the outside of the bag; otherwise, two bags are used.

I. Unused Sharps

Question: What are Unused Sharps?

Answer: Unused sharps are unused, discarded sharps, hypodermic needles, suture needles and scalpel blades.

Question: Do unused needles, or needles that have not come into contact with a patient (needles used only to puncture IV line ports or medicine vials), that are going to be discarded have to be treated as infectious waste?

Answer: Yes. Needles present an injury hazard to health-care personnel and waste workers. Therefore, they should be stored, transported and disposed of in the same manner as needles used in direct patient care.

J. Packaging

Question: How thick should a "red bag" be?

Answer: The North Dakota Infectious Waste rules do not dictate the thickness of a bag. The rules do require that waste be placed in distinctive containers that do not leak and that are impervious, puncture resistant and tear resistant. Generators also must comply with the U. S. Department of Transportation's (DOT) packaging regulations if transporting materials that meet DOT's definition of regulated medical waste. This also includes waste generated and transported by professional home health-care providers.

Question: Should treated waste be packaged and labeled as infectious waste?

Answer: If the waste has been rendered noninfectious, it is considered a solid waste and no longer needs to be labeled as infectious waste. If the wastes were treated in red bags and red containers and are still recognizable, the disposal facilities must be notified that the waste is coming and that it has been treated.

Question: How should the containers be labeled if shipped off-site for treatment?

Answer: Containers of infectious waste shipped off-site for treatment must be labeled with the universal biohazard symbol as specified in the BPS (29 CFR 1910.1030 (g)(1)(i)(B) and (C)) and the word BIOHAZARD. In addition, the containers and labeling must meet the DOT packaging, marking, labeling and record-keeping requirements.

Question: Should bags used to line a container be labeled?

Answer: Yes. Bags used to line the inside of a container must be labeled or color-coded according to paragraph 29 CFR1910.1030(g)(1)(I). If individual containers of blood or regulated infectious waste are placed in a larger container during storage, transport, shipment or disposal and that larger container is either labeled with the OSHA "BIOHAZARD" label or color-coded, the individual containers are exempt from the labeling requirement.

Question: Can I mix solid waste with infectious waste?

Answer: No. The rules require that regulated infectious waste be separated from other wastes at the point of origin. Any solid waste that is mixed with infectious waste or solid waste placed in an infectious waste container must be managed as infectious waste.

K. Disinfection

Question: What does disinfection or disinfect mean?

Answer: As used in the rules, disinfection or disinfect means to remove, inactivate or destroy bloodborne pathogens on a surface or item to the point where the surface or item is no longer capable of transmitting infectious particles. Incineration is one method to disinfect infectious waste. Alternative methods of disinfection include thermal

treatment, such as microwave technologies; steam sterilization, such as autoclaving; and chemical/mechanical systems. Attachment 2 lists EPA's Registered Antimicrobial Products for Medical Waste Treatment (updated Dec. 2, 2002) that can be used to disinfect infectious waste.

L. Storage

Question: How should facilities store their infectious waste?

Answer: Waste must be stored in a manner and location that maintains the integrity of the packaging and prevents contact with water, precipitation, wind, the general population and animals. Access to storage areas must be limited to authorized personnel. Areas used for the storage of infectious waste should be labeled with the universal biohazard symbol and the word BIOHAZARD. Treated and non-treated infectious waste must be maintained such that there are no off-site odors.

Question: What about outside storage?

Answer: Outdoor storage areas must be locked, must allow access to authorized personnel only, and must be labeled with the universal biohazard symbol and the word BIOHAZARD. All waste must be in containers. The area must be operated so that there are no spills or releases to the environment and to minimize harborage for insects, rats or other vermin.

Question: How long can generators store infectious waste?

Answer: There are no maximum time limits that regulated infectious waste may be stored by generators. Such waste must be maintained in a nonputrescent state, using refrigeration when necessary.

Question: Can containers of infectious waste be compacted before disposal?

Answer: No. The rules state that regulated infectious waste may not be subject to mechanical stress or compaction during loading, unloading and transit. Damaged containers and single-use containers contaminated with spilled or leaked infectious waste must be repackaged before transport. To minimize exposure during repackaging of the materials, it is recommended that appropriate personal protective devices be used.

Question: If a generator moves to a new location or closes, can it leave its infectious waste behind for someone else to clean up?

Answer: No. When a waste generator relocates, closes or ceases to generate infectious waste, all infectious waste must be removed and managed in accordance with the North Dakota Infectious Waste Management Rules. Abandonment of waste is a violation of Section 33-20-01.1-04 NDAC.

M. Transportation

Question: Are generators who transport their own infectious waste to a treatment facility required to have a waste transporter permit?

Answer: No. However, DOT requirements must be met.

Question: Are there other requirements that generators must meet if they choose to have a treatment company dispose of their infectious waste?

Answer: Yes. Infectious waste must be packaged in accordance with the BPS and the DOT requirements. Reusable containers are acceptable, but they must be disinfected immediately after use. Many waste treatment companies provide these containers to their clients, replacing them with disinfected containers during their scheduled pickup.

Question: Can generators use any transporter or management company to dispose of their infectious waste?

Answer: Yes. However, the company must have a valid North Dakota Solid Waste Transporter permit. All in-state commercial treatment facilities must also have a solid waste management permit from the Department of Health.

Question: Are generators responsible for their waste once a permitted transporter has picked up their waste?

Answer: Yes. Generators are responsible for their waste from cradle to grave.

N. Record Keeping

Question: Are there any record keeping requirements for shipments of untreated infectious waste?

Answer: No. The infectious waste rules do not require generators to keep records of shipment of untreated infectious waste. However, the Department of Health strongly encourages all generators to keep records of the amount of untreated infectious waste shipped off-site for treatment and where it was sent for treatment. The treatment facility may send a certificate of destruction back to the generator. Generators should keep copies of the shipment documents and any certificates of destruction for at least three years.

O. Spills

Question: What about infectious waste spills?

Answer: Spills of infectious waste must be cleaned up immediately and the area disinfected. Spills that may affect the general public health must be reported immediately to the Department of Health. During normal business hours, spills may be reported to the Department of Health at 701.328.5166 or 800.755.1625. Outside normal working hours, spills may be reported to State Radio at 800.472.2121 (in-state calls) or 701.328.9921 (out-of-state calls).

P. Cytotoxic Waste (Chemotherapy Waste)

Question: What is chemotherapy waste?
Answer: Chemotherapy waste means any disposable material that has come in contact with cytotoxic/antineoplastic agents and/or antineoplastic agents during the preparation, handling and administration of such agents. Such wastes include, but are not limited to, masks, gloves, gowns, goggles, empty IV tubing, bags, gauze and vials and other contaminated materials.

Question: What about containers holding liquids?
Answer: A container (i.e., vial, IV bag, syringe) that holds free liquid, excluding residual amounts, must be managed as a hazardous waste.

Under the North Dakota hazardous waste rules, all cytotoxic/ antineoplastic liquid wastes are considered hazardous wastes because they are either "U" listed wastes or they exhibit the characteristic of toxicity (unless proven otherwise). Expired antineoplastic drugs can be managed through a reverse distribution system.

Following are some common antineoplastic wastes and the waste codes associated with them.

Chlorambucil	U035	Cyclophosphamide	U058
Daunomycin	U059	Melphalan	U150
Mitomycin C.	U010	Streptozotocin	U237
Uracil Mustard	U237		

Place the entire container into the bulk hazardous waste container for proper disposal. Individual containers of antineoplastic wastes can be accumulated in a larger container. The containers should be labeled with the words "Hazardous Waste" or "Toxic Waste" and the date the waste was first placed into the container.

Question: What about non-liquid cytotoxic wastes?
Answer: Non-liquid cytotoxic waste should <u>not</u> be disposed of in a sanitary landfill. Empty vials, syringes, gloves, IV bags, alcohol swabs, gauze and paper towels used to wipe up spills must be placed in a cytotoxic waste container that is clearly labeled. Gowns, masks and goggles that have been splashed or otherwise contaminated with a cytotoxic/antineoplastic agent should also be placed in a cytotoxic waste container that is clearly labeled.

These wastes should be incinerated rather than autoclaved. Incineration temperature of 1,000º centigrade (1,832º fahrenheit) is recommended to render cytotoxic substances harmless.

Needles used with cytotoxic agents must be placed in a designated sharps container for incineration as a regulated infectious waste.

Linen overtly contaminated with any cytotoxic agent or excreta from a patient within 48 hours following drug administration, may be safely handled by using the procedures prescribed for isolation cases. For example, place the contaminated articles in a "yellow" cloth bag lined with a water-soluble plastic bag and then place into the washing machine. Linen without overt contamination can be handled by routine laundering procedures.

Q. Pharmaceuticals

Question: How must waste pharmaceuticals be managed?

Answer: Discarded drugs and pharmaceuticals become a waste at the time the decision to dispose is made. Once that decision is made, it is the responsibility of the generator to determine if the waste is hazardous. Waste pharmaceuticals are hazardous waste if they are a characteristic waste or a “P” or “U” listed chemicals. Characteristic hazardous waste are those that are ignitable, corrosive, reactive or toxic. “P” or “U” listed wastes are wastes such as commercial chemical products, manufacturing chemical intermediates, off-specification commercial chemical products or manufacturing chemical intermediates, mixtures of the chemicals listed and spill residues. The North Dakota hazardous waste management rules contains a list of “P” and “U” wastes.

Pharmaceuticals are listed hazardous wastes only if they consist of a *single active ingredient*. For example, a 1 to 10,000 vial of epinephrine is a "P-listed" P042 hazardous waste if it is being disposed. There may be other chemicals in the product, but if the *only active ingredient* is "P" or "U" listed, then the product is a listed hazardous waste.

Examples of “P” listed hazardous wastes are Nicotine, P075, used in anti-smoking medicines; and, Epinephrine, P042, used to treat insect sting anaphylactic shock.

Examples of “U” listed hazardous wastes are Lindane, U129, used for lice shampoo; Warfarin < 0.3%, U248, used as an anticoagulant; and, Selenium sulfide, U205, used in dandruff shampoos.

Examples of characteristic hazardous waste are (a) certain brands of nasal decongestants and contact lens cleaners containing thimerosal have the toxicity

characteristic of mercury, D009 (b) some mouthwashes containing > 24% alcohol are ignitable D001; and (c) some brands of silver nitrate cauterizers are ignitable, D001, and have the toxicity characteristic of silver, D011.

Use of a reverse distributor is an acceptable option for management of outdated pharmaceuticals.

Question: What about controlled substances?
Answer: Controlled substances such as codeine, opiates, tranquilizers, etc., are addressed under different regulations by the U.S. Drug Enforcement Agency and the North Dakota Pharmacy Board.

R. Miscellaneous

Question: Can generators dispose of untreated waste at the local landfill?
Answer: No. Regulated infectious waste cannot be disposed at the local landfill or any other permitted landfill unless it has been rendered noninfectious.

Question: Can the local landfill reject infectious wastes that have been treated?
Answer Yes. Landfill operators have the right to reject any waste for disposal in the landfill, even if federal, state or local regulations allow landfill disposal of such waste.

S. Contact Information

Question: Where can questions or information requests be directed concerning the Bloodborne Pathogen Standard and the North Dakota Infectious Waste Regulations?
Answer: Questions or information requests concerning the BPS may be directed to the North Dakota Department of Health, Division of Health Facilities, at 701.328.2352. Questions or information requests concerning North Dakota's Infectious Waste Regulations may be directed to Christine Roob, North Dakota Department of Health, Division of Waste Management, at 701.476.4121.

Attachment 1

CHAPTER 33-20-12
REGULATED INFECTIOUS WASTE

33-20-12-01. Definitions.

1. As used in this article, "regulated infectious waste" means an infectious waste which is listed in subdivisions a through g of this subsection. Ash from incineration and residues from disinfection processes are not infectious waste once the incineration or the disinfection has been completed.

   a. Cultures and stocks. Cultures and stocks of infectious agents and associated biologicals, including cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

   b. Pathological waste. Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.

   c. Human blood and blood products. Liquid waste human blood; products of blood; items saturated or dripping with human blood; or items that were saturated or dripping with human blood that are now caked with dried human blood (including serum, plasma, and other blood components, and their containers).

   d. Sharps. Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

   e. Animal waste. Contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biological, or testing of pharmaceuticals.

   f. Isolation waste. Biological waste and discarded materials contaminated with blood,

excretion, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases.

g. Unused sharps. Unused, discarded sharps, hypodermic needles, suture needles, and scalpel blades.

2. As used in this chapter, "disinfection or disinfect" means to remove, inactivate, or destroy blood borne pathogens on a surface or item to the point where the surface or item is no longer capable of transmitting infectious particles.

History: Effective December 1, 1992.
General Authority: NDCC 23-29-04
Law Implemented: NDCC 23-29-04

33-20-12-02. Management standards. In addition to sections 33-20-01.1-04, 33-20-01.1-05, 33-20-02.1-01, and 33-20-04.1-08, every person who collects, stores, transports, treats, or disposes of regulated infectious waste shall comply with these standards of performance.

1. At the point of origin, regulated infectious waste must be separated from other wastes and placed in distinctive containers which do not leak and which are impervious, puncture resistant, and tear resistant and which contain obvious markings (for example, red or orange plastic bags or the biohazard label). Bags and containers holding regulated infectious waste must be tied, closed, or sealed securely to prevent leakage.

2. At the point of origin, sharps must be:

   a. Separated from other regulated infectious waste, disinfected onsite, rendered nonsharp onsite, and then disposed; or

   b. Placed in rigid and puncture-resistant biohazard containers and handled as required by subsection 5.

3. The handling and storage of regulated infectious waste, before the treatment of subsection 5, must be conducted in a manner which minimizes exposure to employees of the waste generator, the waste transporter, and the public.

4. Recycled containers or devices such as carts used for the handling of wastes must be disinfected after each use.

5. All regulated infectious waste must be incinerated or disinfected and sharps that are not incinerated must be rendered nonsharp before disposal. Incineration and disinfection equipment and facilities shall meet the requirements of article 33-15 and this article.

6. Blood and blood products can be discarded without incineration or disinfection through

municipal sewage disposal systems that meet the requirements of article 33-16.

7. The disposal of nonviable human fetuses shall meet the requirements of section 33-03-02-05.

8. An infectious waste which is not regulated by this chapter may be disposed at a permitted municipal waste landfill.

9. Household waste containing regulated infectious waste in amounts normally found in household waste may be disposed of at a permitted municipal waste landfill.

History: Effective December 1, 1992.
General Authority: NDCC 23-29-04
Law Implemented: NDCC 23-29-04, 23-29-05.2

Attachment 2

EPA's Registered Antimicrobial Products for Medical Waste Treatment
(Updated December 2, 2002)

Product: BARQUAT 42Z-10
EPA Reg#: 6836-57
Registrant: LONZA INC
Approval Date: 11/26/1980
Active Ingredient
Alkyl* dimethyl benzyl ammonium chloride *(60%C14, 30%C16, 5%C18, 5%C12) 5.0000%
Alkyl* dimethyl ethylbenzyl ammonium chloride *(68%C12, 32%C14) 5.0000%

Product: DISORB TUBE
EPA Reg#: 072643-00001
Registrant: BOHLE MEDICAL SUPPLIES PTY LTD
Approval Date: 08/29/00
Active Ingredient:
Iodine 10.6500%
Sodium dichloro-isocyanurate dihydrate 05.0000%

Product: ENCHLOR 25
EPA Reg#: 69972-1
Registrant: TECHNOLOGY 2100
Approval Date: 10/16/96
Active Ingredient: Sodium chloride 25.000%

Product: ISOLYSER LTS-PLUS
EPA Reg#: 62290-1
Registrant: ISOLYSER Co, Inc.
Approval Date: 02/25/00
Active Ingredient: Sodium dichloro-s-triazinetrione 10.2000%

Product: PREMICIDE
EPA Reg#: 46781-10
Registrant: METREX RESEARCH CORP.
Approval Date: 03/07/97
Active Ingredient: Glutaraldehyde 09.6100%

Product: PREMIDYNE
EPA Reg#: 46781-11
Registrant: METREX RESEARCH CORP
Approval Date: 08/15/99
Active Ingredient: Sodium dichloroisocyanurate dihyfrate 99.0000%

Product: SANISORBX
EPA Reg#: 072675-00001
Registrant: MULTISORB TECHNOLOGIES, INC.
Approval Date: 06/04/01
Active Ingredient: Glutaraldehyde 09.6000%

Product: STER-CID
EPA Reg#: 71814-1
Registrant: GMS MARKETING SERVICES
Approval Date: 09/30/99
Active Ingredient:
Glutaraldehyde 10.7200%
Alkyl* dimethyl benzyl ammonium chloride *(50%C14, 40%Cl2, 10%C16) 17.0600%
Didecyl dimethyl ammonium chloride 07.8000%

Product: VIODINE
EPA Reg#: 69251-1
Registrant: COLBY MANUFACTURING CORP.
Approval Date: 07/17/97
Active Ingredient:
Iodine 3.5000%
Phosphoric acid 3.5000%

Numerical Order

List G: EPA's Registered Antimicrobial Products for Medical Waste Treatment (Updated December 2, 2002)

6836-57 BARQUAT 42Z-10
46781-10 PREMICIDE
46781-11 PREMIDYNE
62290-1 ISOLYSER LTS-PLUS
69251-1 VIODINE
69972-1 ENCHLOR 25
71814-1 STER-CID
72643-1 DISORB TUBE
72675-1 SANISORBX